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trated by practical experiments; by Mr. Flower on pre-historic sepulchres in Algeria, shewing the connection between the megalithic monuments of North Africa and Europe; appropriately followed by one from the Rev. W. C. Lukis, on pre-historic sepulchres in Brittany; by Mr. Bruce Foote, on quartzite implements of drift type found in laterite deposits of Madras, which were of the same forms as the flint implements found in Europe; and by Sir Walter Elliott, on sepulchral remains in Southern India. The interest of the proceedings was much enhanced by the exhibition of large numbers of specimens belonging to M. Réboux of Paris, Sir Walter Elliott, Mr. Foote, and Mr. Fitch, the Sheriff of Norwich.

Wednesday being the last day for reading papers, it was proposed to hold an evening meeting, to dispose of those which might remain after the labours of the morning. The papers read this day were by Mr. A. W. Franks on Stone Implements from Japan, from which it appeared that the Japanese, like the Shetlanders, considered these implements to be thunderbolts; and that the forms of the Japanese implements resembled those of Europe; by Mr. Boyd Dawkins, F.R.S., on the mammalia associated with prehistoric man, a very elaborate and exhaustive communication; by Mr. H. Woodward, on the curvature of the tusks in the mammoth from Ilford, compared with those from Siberia; on the Ogham Monuments of the Gaedhal, from Mr. R. R. Brash, who considered that these monuments were of Spanish origin and of great antiquity, views which it may be supposed did not meet with unanimous assent; and from Messrs. de Ferry and Arcelin on the Reindeer period, in certain parts of France.

The remainder of the week was chiefly spent in London, where it was arranged for the Congress to visit the College of Surgeons, the British Museum, the Christy collection, and other places of interest, a final meeting being held at the rooms of the Society of Antiquaries, when it was arranged that the Congress of 1869 should take place at Copenhagen.

Owing probably to the counter attractions of the section meetings of the British Association, the meetings at Norwich were not on the whole so well attended as might have been anticipated, which was much to be regretted, since the proceedings were, as may be judged from this imperfect sketch, of a most interesting and valuable character.

Thanks were voted to Sir Duncan Gibb and Mr. A. L. Lewis for their Reports.

Mr. DENDY then read a Paper on Anthropogenesis, which he prefaced by quoting the remark of a Rt. Rev. Doctor at Norwich, that it was the duty of every man of faith to inquire more, and of every man of science to believe more; and he said that it was in that spirit that the paper was written:—

(Abstract.)

The paper referred to the two contrasted opinions regarding the genesis of man, creation and evolution, analysing the dogmas of Lamarck and Oken (to the rejection of all historic testimony), and the hypothesis of Mr. Darwin, transmutation or natural selection. It was argued, that the origin of man in the evolution of a monad (a process in which, in

Mr. Darwin's words, "force almost creates in production"), is as great a mystery as the creation of a man. Allusion was made to the experiment of Crosse, of Bristol, the vitalising or evolution of an insect from inorganic matter. Spontaneous development, the doubt of a first cause, necessitates, of course, the possibility of an effect without a cause. Passing over the zoophytes and lower animals, the paper discussed the subject of transmutation, by a happy accident in the act of generation of the most anthropomorphous of the simiæ, the Chimpanzee, into perfect man. Yet, this man-like ape, with all his association with man, is absolutely deficient in the most noble endowment or faculty of speech, although provided with vocal organs almost identical with those of man; while pies, and daws, and parrots, can, by imitation, articulate the human language. It is strange, if transmutation be a fact, that during the whole historic period, not the slightest approximation to the "missing link" has ever been noted in the generative accident of a monkey; indeed, the ape has seemed rather to have retrograded in his anthropomorphism. In referring to the most important comparative anatomy of the skull and the brain, allusion was made to the rudimental lateral ventricle and the non-overlapping of the cerebellum, arising from an arrest in the growth of the cerebrum in the simiæ; the brain of the young Chimpanzee and the infant so closely resembling each other. In reference to palæontology, in proof of their theory, the disciples of Darwin taboo all historic testimony of the Jews, and adopt the testimony of the rock, and yet palæontology, with all their specious advocacy, has proved little or nothing for transition. Then, the equatorial apes and dwarfs (the highest simia and the lowest homo), although for ages in juxtaposition, have never been known to "cotton" together. The contemplation of this persistent degradation, certainly favours Max Müller's assertion, that the chasm between ape and man can never be bridged over.

In favour of plurality of race, in coincidence with Rudolphi, Vogt, etc., allusion was made to the greater difference between the Chimpanzee and Gorilla, than between the Mandingo and the Guinea Negro, the latter of whom has never, in any climate, changed his form, his colour, or his wool. The historic traditions of Genesis were adduced in illustration of polygenesis, Adam being the archetype of the last creation, the Aryan or Caucasian variety; the word man being, therefore, considered a generic term, signifying mankind. Holy writ may, therefore, be congenial with historic anthropology, Shem, and Ham, and Japhet being the progenitors of the three races, with which number Cuvier was content to form his classification.

The paper, therefore, did not agree with Mr. Darwin or Sir John Lubbock regarding the simial parentage, or the "utter degradation" of man in his primitive form.

The following gentlemen joined in the discussion.

The Rev. DUNBAR HEATH observed that the central point of the paper appeared to be, whether it is more likely that there should have been an original creator of organised matter than that monads should have been developed from inorganised matter. He had been accused of being an atheist, he would therefore state what his opinions were, that

it might be seen whether that term was correctly applied. He thought that they might feel there is a God and trust to Him ; but they did not know him. The composite organism called man was a duality consisting of intelligence and feelings, including moral feelings. Though the two were in all actions united in one, they were logically distinguishable ; thus it was possible to feel what they did not know, and to know what they did not feel. For instance, he felt the heat of the fire but he did not know the nature of heat ; no one knew anything of the cause of heat, there was no novelty in that opinion ; it was admitted that feeling was different from knowing. Knowing was also distinct from feeling : it was known, for example, that two sides of a triangle are greater than the third, but they did not feel it ; the knowledge was not accompanied by any emotion ; he knew it logically, but he had no feeling of it. Having thus shown the paths by which they must travel, they might trace the source of man's belief in God. It was found that in all times of man's experience, whether of sorrow or of joy, he feels there is a God ; in times of misery man leans upon a God, and he does the same in times of happiness. No society could wipe away that feeling—mankind, it must be admitted, accepts a God. He did not deny that. But it was a different matter when the question came to be examined in a scientific society, whether it was more probable that the origin of man was by creation or evolution. It was a million times more probable, in his opinion, that a living monad was evoked from inorganic matter than that it should have been created. By the latter hypothesis it was attempted to explain a little mystery by one a million times greater, for it was more easy to conceive the original existence of a monad than of a God. The Hebrews solved the difficulty by conceiving their deity to be an organised being, who clothed himself with light as with a garment, and was surrounded with organised matter as a vestment,—the strength of the hills is His also. That was the Hebrew way of getting out of the difficulty. But the Greeks, in their Septuagint, altered the Hebrew Bible to introduce the idea of a pure spirit ; he thought that in sketching the question as he had done he had logically given an answer to the paper. With regard to such matter they knew nothing about it, they only knew the phenomena of matter ; the phenomena could be weighed, their effects could be calculated, and their properties might be known ; but of matter itself nothing could be known. They might assume certain things, they might conceive points endowed with certain forces and call them matter, but it was merely a name ; they did not know matter ; and in the same way they might speak of God, but they knew Him not. Referring again to the paper, he said he did not think that Mr. Dendy had shown that creation was more probable than evolution ; he could not conceive independent creation, but he could conceive it to be possible that a little carbon, hydrogen, and oxygen being the centre of certain forces might, by their mutual actions, produce a fourth force, and that might be an organic force and act according to a type. Organic forces act with a purpose, and might produce others ; how organic forces could be evolved from forces not organic they did not know, but he contended that it was a millionfold more improbable

that such forces should have been created than that they should have evolved.

MR. PIKE considered the basis of the paper to be the theory that it is more probable that a creator has produced man than that man has been evoked from a cell. He felt great difficulty in discussing any subject which seemed to require a confession of faith. As a matter of opinion, he thought Darwinism might as easily as any other scientific view be reconciled with scripture; but inasmuch as the paper was avowedly founded in fact upon the Bible, he felt that he could hardly call its conclusions in question without exciting a suspicion that he wished also to call in question the book upon which it was founded. He did not see how it was possible to discuss the paper without the introduction of subjects which a scientific society should avoid.

DR. DUNCAN said that the Committee of Investigation, whose recommendation had been alluded to, had no wish to limit reasonable discussion upon sacred subjects; but it considered that it was not advisable to publish every thing that might fall from the Fellows in the course of a free and open debate. He was hardly prepared to hear Dr. Dendy's paper treated in a metaphysical manner, and although he admired the eccentric arguments he had heard, he considered that the Fellows should limit themselves to the analysis of concrete facts. The question really was, not as Mr. Dunbar Heath had put it, but did man come from an ape? Darwin had never written a passage which asserted the ape origin of man, and it was not fair, nor according to scientific logic, to infer from passages in the *Origin of Species* that such was Mr. Darwin's opinion. In no place had Mr. Darwin asserted the origin of the monad from inorganic matter, but he had protested that analogy was an unsafe guide. Dr. Duncan considered that the reason why Mr. Darwin had not carried his theory farther was because he had insufficient data, and he thus gave a tacit reproof to scientific men who like to jump at conclusions upon very slight facts. There was at present no more right to assert that man came from an ape than that the species of a genus well and structurally separated from those of another descended genetically. The structural peculiarities of the nervous systems of men and apes had much in common, but there were considerable microscopical differences, some of which had lately been published by Lockhart Clarke in the *Philosophical Transactions*. Nevertheless, it was an uncomfortable fact that the anomalies in the origin and insertion of muscles in man were normalities in the ape. The "sports" were backwards to the quadrumana. Whatever was the truth, it was evident that in Holy Writ man came from "the dust;" and if so, whence comes the monkey? metaphorically from "the earth."

DR. CRISP said he had listened to Mr. Dendy's paper with much pleasure, and although not opposed to Darwin's theory, in the main, he thought, with Mr. Dendy, that the line of demarcation between the apes and the human species was so well marked, that he felt surprised that any persons who had studied the anatomy of the quadrumana could come to a contrary opinion. He could say a great deal upon this question, but he would only occupy the time of the Society in

alluding to a few important points. The anthropoid apes and the generality of the monkeys had a dark-coloured sclerotica ; the spinous processes of the cervical vertebræ of the gorilla were longer than those of the lion, rhinoceros, or hippopotamus, the thirteen ribs of the gorilla and of the chimpanzee ; the absence of skull-sutures ; the absence of the ligamentum teres of the hip-joint ; the want of the styloid processes ; the rudimentary mammillary processes, and many other osteological characters might especially be mentioned. But when we came to the visceral anatomy of the anthropoid apes, of the gorilla, for example, as he (Dr. Crisp) had recently shown at the British Association, what a difference was observed ! No valvulæ conniventes in the intestines, in the gorilla the cæcum and large intestines of enormous size, and furnished with glands differing materially from those of men ; a tripartite liver, and other peculiarities which time would not allow him to mention. Those who supported the transition theory of ape to man, Dr. Crisp thought, were like special pleaders, who saw the resemblances but forgot the differences. In 1864 he had heard Professor Huxley state in his lectures at the College of Surgeons, that anthropoid apes had no penis-bone. Not satisfied with this statement, he, Dr. Crisp, as on other occasions, determined to judge for himself, and in more than a dozen anthropoid apes (chimpanzees and ourangs) he had found a penis-bone in all ; the gorilla he could not speak of, as one he had examined was a female, and in the other the organs of generation were absent. In a young ape, sent over in spirits, said to have been a Koolookamba (Nshiego-mbouvé), he did not find a penis-bone. The question as to the existence of a penis-bone in the gorilla was one of great interest ; he had placed on the table the penis-bones of the orang and chimpanzee, and of many species of monkeys that he had dissected.

Dr. CARTER BLAKE thanked Mr. Dendy for a thoroughly philosophical paper, which bore out his (Mr. Dendy's) high reputation as a scientific man. He was glad to see that the Anthropological Society maintained their old character of producing the strongest advocates against the Darwinian theory ; Mr. Dendy had spoken of Darwin as if he were the Coryphæus of the transmutation hypothesis, but it ought to be remembered that Professor Owen (whose writings had been strangely misinterpreted by the less educated class of Darwinites, in and out of the Society,) whilst opposing Darwinism, had long advocated a rational system of accounting for the origin of species according to the method of " derivation by secondary " law exemplified in his " Anatomy of Vertebrates." He expressed what he thought of those Darwinites who could not appreciate scientific investigation, and could only pick up the garbage which Lamarck and Darwin dropped, and he wished such scientific dabblers would just try to find out what it was that Prof. Owen really said and really meant. With regard to Peter, the wild boy, to whom Mr. Dendy had alluded, cases of the same kind were described in Professor Vogt's " Memoir on Microcephali." As regarded the " hippocampus minor " controversy, he was glad to see that Mr. Dendy, an anatomist " loyal et compétent," was on the right side, and agreed with Tiedemann, Cruvelhier, and Owen, that the structures

called the "third lobe," "posterior horn of lateral ventricle," and "hippocampus minor", were peculiar to, and characteristic of man, while absent in the brains of the highest apes. Less reliable anatomists had impugned this, but in the year 1868 the truth might as well be told. Mr. Dendy had selected the chimpanzee as the species of ape most closely allied to man. As its muscular system had been thoroughly investigated, the chimpanzee might most certainly be most convenient for comparison; but in his (Dr. Blake's) opinion the gorilla was the species which most resembled man. The faculty of speech had been stated by Dr. Broca to be coincident with one of the frontal convolutions of the brain, a convolution which might be conveniently called "Broca's convolution." Mr. Dendy had shown that that convolution was developed in man to a greater extent than in the apes. Dr. Blake said he was much pleased with the collection Dr. Crisp had exhibited of the penis-bones of various apes, and he could not but notice that the size of the penis-bone seemed to bear no relation whatever to the size of the animal; it was as large in the small bonnet-chinois monkey (*Macacus sinicus*) as in the chacma (*Cynocephalus porcarius*). In the koolookamba, as Dr. Crisp said, it might be absent, and that was a very strange fact, as the koolocamba, according to Du Chaillu's description, was more closely allied to man than any other ape. Though Mr. Dendy's facts were exceedingly well marshalled to oppose the hypothesis of transmutation, they should not make Fellows of the Society forget that the human remains of greatest antiquity are certainly the most anthropoid. Dr. Blake, in conclusion, observed that as it seemed to be the fashion that evening for gentlemen to make their confessions of faith, he would say that his conviction was that the differences between man and ape did not consist in speech, mind, soul, and thought, but in anatomical differences; the distinction between the sub-class archencephala, comprising man alone, and the sub-class gyrencephala, being enormous. Mankind differed from the apes by distinctions which could be tested by the scalpel, the callipers, and the measuring tape, and by nothing else.

On the motion of Mr. MACGRIGOR ALLAN, seconded by Mr. MACKENZIE, the debate was adjourned to the 17th of November.

NOVEMBER 17TH, 1868.

SIR DUNCAN GIBB, BART., VICE-PRESIDENT, IN THE CHAIR.

THE Minutes of the previous meeting were read and confirmed.

The following list of presents was then announced:—

FOR THE LIBRARY.

From the AUTHOR—Ancient Faiths (second copy); On Myalgia; The Preservation of Health; Foundation for a New Theory of Medicine; Spontaneous Combustion; On Ancient Pillar Stones and Cairns; Is Alcohol Food? Dr. Inman.

From the SOCIETY—Bulletins de la Société d'Anthropologie de Paris.

From the SOCIETY—Proceedings of the Royal Society.

From the EDITOR—Medical Press and Circular.

- From the SOCIETY—Proceedings of the Royal Asiatic Society of Bengal, 6, 7, 8 ; Journal 1, 2, and Ex. No.
- From the INSTITUTE—Proceedings of the Essex Institute, January and April, 1868.
- From the COLLEGE—Annual Report on the Museum of Comparative Zoology at Harvard College.
- From the SOCIETY—Memoirs of the Boston Society of Natural History : Annual, 1868-9 ; Report, May 1867-8 : Proceedings, Vol. XI, 1860-8.
- From the INSTITUTION—Annual Report of the Board of Regents of the Smithsonian Institution.
- From the AUTHOR—Fresh-water Shell-heaps of St. John's River, East Florida. Dr. J. Wyman.
- From the AUTHOR—Handbook of Archæology. Hodder M. Westropp.
- From EDWARD JARVIS—Census of United States Mortality and Population, 2 vols., 4to. J. C. Kennedy.
- From SIR DUNCAN GIBB, Bart.—The Laryngoscope in Diseases of the Throat : Sir Duncan Gibb, Bart. Annual Address of Geological Society of London, 1846-59, 47 and 51. The Mineral Waters of Vals : Dr. Tourrette. Essay on the Mineral Waters of Eaux Bonnes : Dr. L. Leudet. The Book of the Chronicles of the City of many Fountains, chap. xxxi.

The DIRECTOR announced that the Council had resolved that, for the future, any member of the Society who sent to the Secretary addressed and stamped envelopes, corresponding to the number of evening meetings in the Session, would receive a printed slip of the Proceedings the day after each meeting.

The adjourned discussion on Mr. Dendy's paper on "Anthropogenesis," read at the previous meeting, was then resumed.

MR. KENNETH R. H. MACKENZIE said there was one thing in the paper, in reference to his lamented friend Mr. Crosse, on which he desired to make a few remarks. The discoveries of that gentleman, of electrical *acari*, were spoken of as the result of experiments undertaken for the purpose of developing them ; but that was not so. The spontaneous generation of these *acari* was quite unexpected by Mr. Crosse, and was the result of an experiment undertaken with a different object ; he subsequently instituted exact experiments. The first experiment had been continued for 212 days in a darkened room, when, on looking at the apparatus, he observed a number of white spots, which budded into worms, and then assumed the appearance of scaly insects. In another experiment, in which an oyster-shell had been subjected to electrical action for one hundred and forty-eight days,—the healthy oyster disappeared, and a marine plant grew out of it. Mr. Mackenzie further explained that Mr. Crosse had no desire to make known the spontaneous generation of electrical *acari* ; but that a conversation between him and the poet Southey having been overheard by the editor of a Taunton paper, the discovery was blazoned forth with much exaggeration, and against his wish. He had been personally acquainted with Mr. Crosse, and would, with the chairman's permission, read a letter on the subject.

June 12th, 1853. Broomfield, Sunday.

My dear Sir,—The experiment to which you allude in your communication, and which was very carefully carried out, was the following:—

I prepared a tubulated glass retort, through the tube of which was passed a wire of platinum, *hermetically sealed*, standing vertically in the bulb of the retort. The glass tube fitted *air-tight* into its neck. This retort was supported by a wooden frame, and its open end dipped into a glass cup of mercury, from which proceeded a long wire of platinum through the whole length of the retort, and was bent at right angles where it entered the bulb, so as to be *parallel* to the first wire, about two inches distant from it. The bulb was half-filled with a carefully prepared solution of *silicate of potash*. The opposite poles of a sustaining battery were connected with either wire, and a *weak electrical current* kept constantly passing from wire to wire, decomposing the liquid in the bulb. Oxygen and hydrogen gases were given out constantly, which were liberated from the mouth of the retort, and slowly bubbled out through the mercury in the glass cup. No *communication* with the atmospheric air *was possible*. The solution was *highly caustic*, and the atmosphere of the retort was, of course, *explosive*; and yet, in this caustic solution, and yet, under this explosive atmosphere, *one single* remarkably fine acarus made its appearance on the hundred and fortieth day. The apparatus was kept in a dark cellar.

I *give no opinion* as to the *cause* of the appearance of this acarus, *not having formed any opinion on the subject*. I have *now fresh experiments* in action on the connexion of electricity with *animal* and vegetable life.

You are welcome to do as you please with this letter, and I beg to remain, dear Sir,

Yours sincerely,

Kenneth Mackenzie, Esq., F.S.A.

ANDREW CROSSE.

Mr. A. L. LEWIS said, in reference to the allusions to the apparent contradictions in the accounts of creation given in the first and second chapters of Genesis, that there were no differences in them that might not be reconciled. He agreed with Mr. Dendy in thinking that it is far more easy to believe in the existence of a Creator than in the springing up of everything spontaneously, no one knew where nor how. He thought, however, it was a pity that any discussion should have arisen on that point, as it was impossible to bring forward conclusive evidence on either side, and, therefore, no practical end could be attained.

Mr. DIBLEY considered there was not sufficient evidence to justify any convictions on the matter, and that it was not possible, by any scientific investigation, to arrive at a satisfactory conclusion. There was a potency of form in Nature, the cause of which could not be grasped by science. Thus, life is a potential form, and the matter in which it is made apparent is nothing more than an inert mass. The connection between them was, however, beyond human comprehension, and not until man had some higher powers given to him could

they properly discuss the subject, and arrive at any scientific conclusion. The only way to arrive at a rational conclusion on the matter was to reason from a general principle. There was known to be a certain perfect order in all things, governed by certain laws, and the most rational explanation appeared to be to allow the existence of a Being, who is order and perfection in himself.

Major OWEN thought that Mr. Dendy was right in reference to Holy Writ, and that if the facts stated rested on a basis that was untenable, it was better to get rid of them.

Mr. DENDY in accepting the confession of faith of the Rev. Dunbar Heath, said, he would waive all polemical allusions, and the discussion of the metaphysics of Berkeley, and limit the arguments between Mr. Heath and himself to the question regarding the inorganic monad, and the vitalised ovulum. Mr. Heath affirmed his belief that it was a millionfold more difficult to accept the idea of a creation, than that of a monad. Why? They were both assumptions; but for one there was tradition, for the other there was not. Admitting the existence of the ovulum in preference to the monad, we could reason on and accept its evolution, a process that is hourly exemplified in the uterus of a mother, and thus we might readily conceive the origin of historic man. In confirmation of his views, he might cite the objection to the monad of many an accomplished Anthropologist, especially that of Paul Broca. (Mr. Dendy read a passage from the works of Dr. Broca, clearly illustrating his decisive opinion.) In alluding to the comments of Mr. Pike on his reference to Holy Writ, Mr. Dendy reminded him that he only adduced the historic tradition of the Bible in his illustration of Polygenesis, as he would the record of Josephus, or the "Disquisition on Ancient India," by Robertson. Of the devotional and theological portion he had been scrupulously reticent. Mr. Dendy expressed his thanks to Dr. Crisp for exhibiting his valuable specimens of the *os penis* of apes, as a very prominent exemplification of the comparative dissimilarity of the apes to man. In referring to the speech of Dr. Carter Blake, he was gratified that Dr. Blake thought that the comparative anatomy of the paper strongly supported the difference between man and ape: yet he (Mr. Dendy), thought that the condition of the mental faculties (so to speak), was even of greater importance than the structural forms: the power of speech, for instance, afforded a powerful example of this distinction; the organic structure appertaining to utterance, being closely resembling in man and ape, yet the endowment or faculty of speech being utterly wanting in the simiæ. Regarding the Neanderthal and other skulls (casts of which were before him), there had been very great exaggeration. We might light on crania of equal deformity in men of the present day; and with respect to palæontological "finds", there was often much suspicion. The quarrymen of France were known to practise frauds—for instance, their own manufactures of them, *langues du chat*, were often offered and accepted as flint-arrow heads. Mr. Dendy then exhibited the skeleton of a rickety abortion, which he himself had delivered, and which, he believed, had it been found in strata associated with the relics of extinct mammalia, would have been

readily accepted as the "missing link". But, even if we found the treasure, it would not prove the Transmutation Theory. It might indicate degradation of species, as well as exaltation, the regress as well as the progress of man; favouring the notion of the Oceanic savage that the ape is a dwindled and degraded man. With regard to the Electric Acarus of Mr. Crosse, alluded to by Mr. Mackenzie, it did not add weight to the theory of spontaneous generation: it might have been the excited evolution of some minute vitalised ovulum, lying latent, even for ages, like the mummy wheat of the Egyptian.

Dr. Charnock, F.S.A., F.R.G.S., V.P.A.S.L., read a paper, written by himself and C. Staniland Wake, F.A.S.L., on "Language as a Test of Race".

[*Abstract.*]

The question, as to whether language is a test of race, is really one of probabilities. Is the race affinity of two peoples, speaking the same language, probable? The affirmative would appear to be almost self-evident, when it is considered that peoples related to each other do generally speak the same, or a dialect of the same, language. This is not only probable, but certain, in many cases; and it may be laid down as a general proposition, therefore, that peoples speaking the same, or dialects of the same, language are racially related: that is, that language is a test of race. The value of this test, however, depends on its agreement with the tests of history, physical structure, religion, and customs, the application of which will either weaken or strengthen the argument derived from linguistic affinity. The objection urged against language being a test of race, derived from the fact of some peoples having changed their language, may be met by showing that every instance of such a change has been the result of circumstances so special, that this loss of language can have taken place only in a limited number of cases. Doubtless, where peoples have taken the language of their conquerors, language loses its value as a race-test. Even these instances, however, may be provided for by enlarging Waitz's proposition, so as to include those peoples who have only temporarily ceased to exist as such. These may be divided into two classes, of which the first will include the case of a semi-civilised people conquered by one much more highly civilised. Under these circumstances, the substratum of the aboriginal language will probably always continue to exist. The second class will include the case of a people almost in a state of nature, conquered by a civilised race, which will generally be accompanied by the imposition of the language of the conquerors. Even here, however, the tendency to perpetuation in the ignorant mind (which in the case supposed would be that of the most primitive element of mixed peoples) of old customs and superstitions, would supply us with materials for correcting the false evidence of language. It has been said (in opposition to Prof. Max Müller's opinion) that some languages have a mixed grammar; and therefore, that as grammatical structure is the test of linguistic affinity, language cannot be a true test of race-relationship. This objection is, however, worthless. Languages do, indeed, sometimes present a mixture of grammatical forms, but it is merely because certain words have been borrowed